



# Consideration of NCDOT's Principles in Project Prioritization

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# Outline

- Background and EPPC Request
- Progress
- Next Steps



## NCDOT Mission

*Connecting  
people and places  
safely and efficiently,  
with accountability and  
environmental sensitivity,  
to enhance the economy,  
health and well-being of  
North Carolina*

## Principles

- Moving People and Goods
- Choices
- Connectivity
- Resource Protection
- Prosperity
- Accountability
- Healthy Communities
- Organizational Responsibility







# Context

## NCDOT

**OUR MISSION**

Connecting people and places safely and efficiently, with accountability and environmental sensitivity to enhance the economy, health and well-being of North Carolina.

**OUR GOALS**

- Make our transportation network **safer**
- Make our transportation network move people and goods more **efficiently**
- Make our infrastructure **last longer**
- Make our organization a place that **works well**
- Make our organization **a great place to work**

### NCDOT

From Policy to Projects

## 2040 Plan

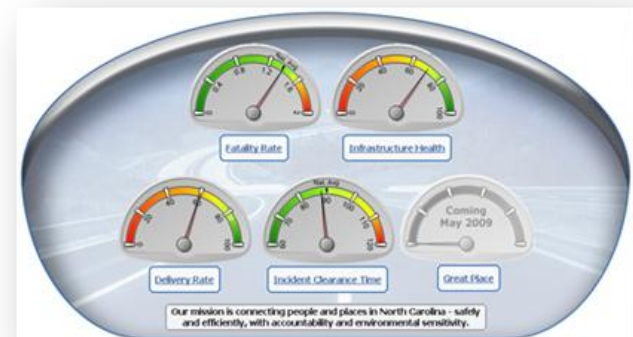
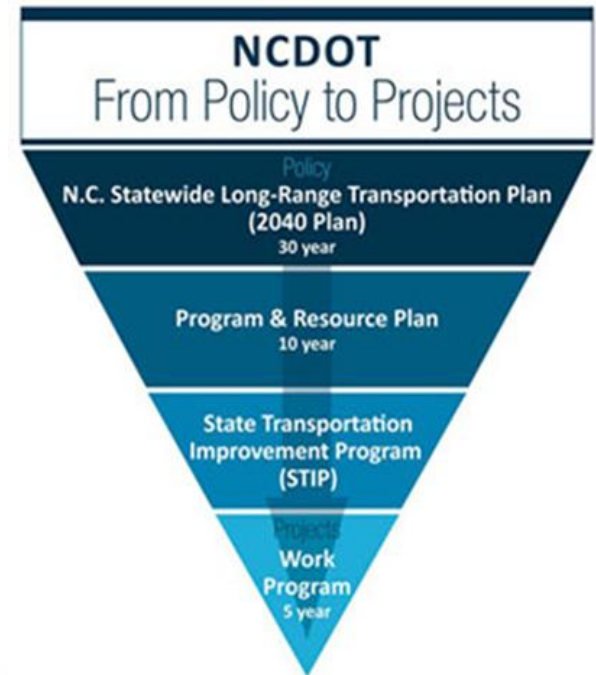
### North Carolina Statewide Transportation Plan

August 2012

Prepared for:

Prepared by:

## ATKINS





## What We've Done

- Crosswalk between MAP-21 and P2.0 project prioritization criteria and Principles
- Gap analysis of Principles and P2.0 project prioritization criteria
- Met with P3.0 Advisory Group
  - Presented information on Gap Assessment
  - Demonstrated relevance to Map-21
  - Provided possible criteria for consideration
- Met with MPOs and RPOs at Quarterly Meetings
  - NCDOT's Principles
  - How principles could be integrated into local prioritization process
  - Identified ways NCDOT could support MPOs and RPOs



MAP-21 NATIONAL PERFORMANCE GOALS	Framework	P2.0
<b>SAFETY:</b> Achieve a significant reduction in traffic fatalities and serious injuries on public roads.	AF7	P2, P6, P7
<b>INFRASTRUCTURE CONDITION:</b> Maintain the highway infrastructure asset system in a state of good repair.	AF6	P3
<b>CONGESTION REDUCTION:</b> Achieve a significant reduction in congestion on the National Highway System.	AF1, AF2, AF3	P1, P6, P8
<b>SYSTEM RELIABILITY:</b> Improve the efficiency of the surface transportation system.	AF1, AF3	P3
<b>FREIGHT MOVEMENT AND ECONOMIC VITALITY:</b> Improve the national freight network, strengthen the ability of rural communities to access trade markets, and support regional economic development.	AF1, AF5	P4, P5, P6
<b>ENVIRONMENTAL SUSTAINABILITY:</b> Protect and enhance the natural environment.	AF2, AF3, AF4	P7, P8
<b>REDUCED PROJECT DELIVERY DELAYS:</b> Accelerate project completion through eliminating project, including reducing regulatory burdens and improving agencies' work practices.	AF6	

	3 or more applicable connections		1 applicable connection
	2 applicable connections		No applicable connections

P2.0 <i>(Only mobility and modernization)</i>	Accountability Framework
P1: Congestion	AF1: Moving People and Goods
P2: Safety Score	AF2: Choices
P3: Pavement Score	AF3: Connectivity
P4: Benefit/Cost	AF4: Resource Protection
P5: Economic Competitiveness	AF5: Prosperity
P6: Lane Width	AF6: Accountability
P7: Shoulder Width	AF7: Healthy Communities
P8: Multi-modal Bonus Points	AF8: Organizational Responsibilities





# Key Issues to Consider about the Project Prioritization Process

- Consistent treatment/evaluation of projects (by goal, tier and mode)
- Considers differences between Mobility and Modernization categories (for Highways)
- Score and rank projects considering the Principles
- Three characteristics for criteria:
  - Project-specific
  - Measurable
  - Data is available (i.e., attainable)





## Approach

- Prioritization 2.0 Gap Assessment
  - Resource Protection
  - Connectivity
  - Prosperity
  - Healthy Communities (public health)
- Review of literature and practices
  - What other states and using
  - What MPOs are using
  - Academic and translational research





# P2.0 GAP ASSESSMENT

P2.0 GAP ASSESSMENT		Highway	Bike/Ped	Transit
MOVING PEOPLE AND GOODS: Efficient transportation network		M1, M6, M8	BP1, M7	M1, T1, T2
CHOICES: Options in how to travel		M7, M8	BP1, M7	T1, T2
CONNECTIVITY: Integration of transportation and land use			BP2, BP3, BP5, BP6	T6
RESOURCE PROTECTION: Protection and conservation of natural resources				
PROSPERITY: Economic growth and development		M4, M5		
ACCOUNTABILITY: Balance of needs and interests with available resources		M1, M3, M4		T4, T5
HEALTHY COMMUNITIES: Livable communities and improved quality of life*		M2, M6, M7*	BP4*	T3*
<div></div>	3 or more applicable P2.0 criteria	<div></div>	1 applicable P2.0 criteria	
<div></div>	2 applicable P2.0 criteria	<div></div>	No applicable P2.0 criteria	
*Criteria consider only safety; gap is in public health in a broader sense				
Mobility and Modernization		Bike/Ped		Transit
M1: Congestion		BP1: Percent of ROW acquired		T1: Expansion
M2: Safety Score		BP2: Connectivity ( <u>with</u> land use)		T2: Connections ( <u>not</u> land use)
M3: Pavement Score		BP3: Inclusion in Adopted Plan		T3: Technology and Security
M4: Benefit/Cost		BP4: Crashes		T4: Age of Fleet
M5: Economic Competitiveness		BP5: Demand/Density		T5: Improved Facilities
M6: Lane Width		BP6: MPO/RPO Rankings		T6: Local Input
M7: Shoulder Width				
M8: Multi-modal Bonus Points				



## P3.0 Workgroup

- Reviewed NCDOT's Principles and Objectives
- Reviewed Gap Assessment
- Scoring criteria must be consistent and fairly applied statewide at the project level
- Consensus that prioritization process already incorporates many Principles
- Consensus that a very limited gap may exist in highway and bike-ped scoring models
- Transit scoring model being revised
- MPO's/RPO's may incorporate criteria in their local prioritization processes





## Results of MPO Outreach

- Quantify the economic benefits
- Make the case for other modes of transportation investment
- Educate locals on the benefits associated with investments to support active modes
- Develop a screening process for transit and rail that identifies viable areas for investment
- Conduct case study research and pre- and post-studies to demonstrate best practices, especially related to multi-modal infrastructure







## Results of RPO Outreach

- Quantify the Economic Development Benefits of Individual Projects
  - Effect of Transportation on Land Uses
- Leverage data and information from NC HUD Sustainability Partnership Grantees
  - GrowNC
  - Piedmont Together
  - CONNECT Vision
  - Lower Cape Fear Regional Plan for Sustainable Development





# Identified Needs in Support of Local Project Prioritization Process

- Case Studies and Best Practices (Anecdotal)
  - Tell the story of how multi-modal investment is paying off
- Evidenced Based Research (Data Driven to NC Context)
  - Pre- and post-evaluation of multi-modal projects
- Quantification of economic development benefits

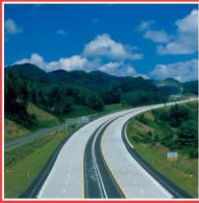




# Questions/Discussion







# North Carolina's HUD Sustainable Community Planning Grant Recipients

